

Bureau of Resource Protection - Groundwater Discharge Permits

BRP WP 11 Modification or Renewal with Plan Approval BRP WP 12 Modification or Renewal without Plan Approval Instructions and Supporting Materials

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Introduction

DEP *Permit Applications*, as well as *Instructions & Support Materials*, are available for download from the DEP Web site at <u>mass.gov/dep</u> in two file formats: Microsoft Word™ and Adobe Acrobat PDF™. Either format allows documents to be printed.

Instructions & Support Materials files in Microsoft Word[™] format contain a series of documents that provide guidance on how to prepare a permit application. Although we recommend that you print out the entire package, you may choose to print specific documents by selecting the appropriate page numbers for printing.

Permit Applications in Microsoft Word[™] format must be downloaded separately. Users with Microsoft Word[™] 97 or later may complete these forms electronically.

Permitting packages in Adobe Acrobat PDF™ format combine *Permit Applications* and *Instructions & Support Materials* in a single document. Adobe Acrobat PDF™ files may only be viewed and printed without alteration. *Permit Applications* in this format may not be completed electronically.

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Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Groundwater Discharge Permits

BRP WP 11 Modification or Renewal with Plan Approval BRP WP 12 Modification or Renewal without Plan Approval Guidance

Guidelines for Hydrogeologic Evaluations

These guidelines are to be followed when producing a hydrogeologic evaluation as part of a groundwater permit application. This evaluation must be completed in addition to the monitoring well plan required of all groundwater discharge permits and the engineering report.

A. Historical Review. Provide the following information concerning activities that have occurred previously at the site.

- 1) Provide site plan and locus map of appropriate scale.
- 2) List all chemicals previously used, stored, and maintained at the site with a description of their physical and chemical characteristics; solubility, specific gravity, soil bonding characteristics, etc.
- 3) Describe the method of disposal utilized for chemicals.
- 4) The piping and plumbing plans should include:
 - a. subsurface piping;
 - b. floor drains;
 - c. any subsurface storage tanks;
 - d. drv wells.
- 5) Provide engineering plans for all subsurface utilities, including gas lines, water lines, storm sewer lines, septic tank leaching field and associated plumbing, telephone lines and roof/vent drains.
- 6) For previous subsurface work, please include these items:
 - a. soil or water quality work;
 - b. soils information from deep hole tests, soil borings, septic tank installation or monitoring wells;
 - c. water levels, if available;
 - d. water table fluctuation information;
 - e. seasonal and tidal influences on water table fluctuation.
- **B. Regional Survey.** Provide the following information concerning water supplies and geologic data for the area of this facility.
- 1) Determine location and use of existing and potential public groundwater supply wells within one mile of the facility. Provide the following items:
 - a. historical and anticipated pump rates, pumped volumes and pumping durations for existing and proposed public water supply wells;
 - b. zone of contribution (Zone II) information generated for public supply wells or interim protective zone, 1 mile radius from discharge point;
 - c. well construction, depth and related soils information;
 - d. information on areas under investigation for water supply purposes;

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- e. historical water quality data.
- Determine location and use of surface water supply areas within one mile of the facility. Provide the following items:
 - a. contributing watershed areas;
 - b. supply volumes and pumping system;
 - c. anticipated use;
 - d. areas under investigation as potential surface water supplies;
 - e. historical water quality data.
- 3) Determine location of private wells within 1/4 mile of the facility. Provide the following items:
 - a. bedrock or overburden wells:
 - b. well depth (if available);
 - c. potentially developed areas that may utilize private wells;
 - d. potential aquifer sources for future municipal supplies.
- 4) Distance to sensitive receptors, such as surface waters and wetland areas
- 5) Provide background geologic data for the area from the following sources:
 - a. USGS topographic map, and locus map and site plan developed from USGS topographic map;
 - b. USGS surficial geologic map;
 - c. USGS bedrock map;
 - d. USGS hydrogeologic atlas.
- C. Subsurface Work Necessary. Provide the following information concerning wells.
- Describe the location of a sufficient number of monitoring wells and multilevel well clusters (bedrock, deep, and water table well) in order to adequately provide these data:
 - a. groundwater flow direction;
 - b. vertical hydraulic groundwater gradients;
 - c. over burden/bedrock hydraulic relationships;
 - d. groundwater quality in bedrock, at depth in the aquifer and at the water table interface;
 - e. permeabilities through the use of in-situ down hole permeability testing and sieve analysis of lithologic units encountered using the method described by the American Society for Testing Materials (ASTM);
 - f. contour contaminant maps (if necessary);
 - g. estimates of groundwater flow rates based on hydraulic gradients and permeabilities as encountered;
 - h. competency and type of bedrock through coring and/or rock quality determinations (wells should typically be screened in the upper 50 feet):
 - estimate of flow path of plume based on hydrogeologic data gathered during investigation;
 - j. determine fracture and joint pattern.
 - k. estimate high groundwater conditions using Department accepted methodologies

Monitoring wells must be constructed according to DEP monitoring well guidelines. These guidelines are available in the DEP Publication *Standard References for Monitoring Wells.* See page 4 of these guidelines for details.



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- **D. Subsurface Testing and Samples.** Follow these procedures for soil borings and samples.
- 1) Soil borings must be drilled in accordance with the appropriate technique outlined in *Standard References for Monitoring Wells*.
- 2) Soil samples (and bedrock cores if applicable) must be collected in the deepest well at each well cluster.
- 3) Soil samples must be collected with a split spoon sampler utilizing (ASTM) guidelines for a sample retrieval and determination of strength.
- 4) Unless continuous sampling is warranted, soil samples must be collected:
 - a. at five foot intervals:
 - b. at changes in the stratigraphy;
 - c. at the water table.
- 5) Soil/bedrock samples shall be classified by a geologist using soil bedrock classifications set forth in *Standard References for Monitoring Wells*.
- 6) A field organic vapor detector such as HNU, Photo Vac, Organic Vapor Analyzer, or Photo Identification Detector should be used to screen the head space in soil jars.
- 7) Soil samples undergoing laboratory analysis for organic compounds must be collected in the appropriate jars and vials.
- 8) Infiltration tests on both primary and reserve effluent disposal areas.
- E. Water Quality Sampling and Parameters. Please follow these procedures for water quality sampling.
- Water quality parameters anticipated for analysis should be included in the Scope of Work. The parameters should be based on chemicals historically utilized at the site, or known to contribute to groundwater contamination.
- 2) Wells must be properly developed and purged prior to sample acquisition, as described in *Standard References for Monitoring Wells*.
- 3) Monitoring well sampling must be carried out according to the protocols described in *Standard References for Monitoring Wells*. Acceptable sampling techniques vary for differing parameters. For example, samples for Volatile Organic Analysis (VOA) must not be aerated during pumping, collection or bottling.
- 4) Must comply with chain of custody of protocols.
- **F. Report Preparation.** The report should include the following items.
- 1) Discussion and inclusion of all items listed in the previous sections of this proposed Scope of Work.
- A base map of appropriate scale incorporating geologic, hydrogeologic, subsurface and cultural features located at the site.



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- 3) Drillers' and geologists' logs for subsurface work.
- 4) Monitoring well construction details.
- 5) Survey data with respect to mean sea level (MSL). Include evaluations of:
 - a. benchmark utilized;
 - b. top of casing, but top of inner well screen pipe is preferable;
 - c. groundwater elevation at monitoring level, accurate to within 1/100 of a foot (see *Standard References for Monitoring Wells*);
 - d. water table.
- 6) Water table topography map.
- 7) Bedrock topography map.
- 8) Surficial geologic map.
- 9) Geologic cross-sections.
- 10) Groundwater profiles showing recharge/discharge areas, including existing and proposed stormwater infiltration basins, if appropriate and vertical/horizontal gradients.
- 11) Contaminant concentration maps for key chemical parameters of concern.
- 12) Calculate groundwater travel time from the disposal area to the nearest public water supply and/or sensitive receptor.
- 13) Conclusions concerning extent of contamination and potential health hazards.
- 14) Recommendations.
- 15) Proposed remedial activities.

Note: These guidelines cover new installations and groundwater remediation situations. When applying for a new permit, disregard items that apply to groundwater remediation only.

The publication *Standard References for Monitoring Wells* is available at the State House Bookstore. It is published by DEP's Bureau of Waste Site Cleanup and may be purchased for \$35.00 (not including postage).



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Engineering Report Requirements

All groundwater discharge permit applications for which a treatment system is proposed must include an engineering report regarding wastewater treatment and plans for the effluent disposal area.

The engineering report shall include, at a minimum, the following items:

- a. a general description of the facility (condominium, office park, laundramat, municipal system, etc.);
- b. a description of the number of employees and/or residents, bedrooms, apartments, elderly housing units, shifts and days of operation per week;
- c a listing of raw materials used, such as but not limited to, chemicals, cleaning products, petroleum products, etc:
- d. a description of the sources of water supply including quantity and quality requirements;
- e. an identification of the sources of all sanitary and industrial wastes streams together with the quantity of flow and waste stream characteristics, including seasonal flow fluctuations, if any. In accordance with 310 CMR 30.302, a determination of whether any industrial waste stream is a hazardous waste stream shall be made for each industrial waste stream:
- f. a description of any by-product recovery systems;
- a listing and description of wastewater treatment studies performed;
- h. a description of liquid waste flow control measures;
- a description of any existing wastewater treatment system, including all design parameters;
- j a description of reclaimed water opportunities
- k. a description of any anticipated new processes:
- a description of the proposed effluent quality;
- m. a listing and evaluation of wastewater treatment alternatives capable of meeting applicable effluent quality;
- a narrative description of the recommended plan for a wastewater treatment facility, based upon the
 preceding evaluation, with detailed design criteria, including flows and loads, number and size of unit
 processes and appurtenant facilities, unit loading, and a preliminary layout;
- o. a hydraulic profile in graphic form, on a sheet no larger than 11 inches by 17 inches, including the final effluent disposal area with water surface elevations at average, peak, and low flow conditions;
- p. a flow schematic, on a sheet no larger than 11 inches by 17 inches, including return lines, chemical feed lines, and sampling points;



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- q. a description of redundancy requirements;
- r. a discussion whether this is the initial phase of a larger project and, if so, how the design will accommodate future phases;
- s. a description of odor control provisions, as necessary;
- t. a description of safety provisions;
- u. a description and location of all chemicals stored, including spill containment provisions;
- v. an implementation schedule for the recommended plan;
- w. treatability and pilot study data on the ability of the proposed treatment system to treat the proposed discharge and meet applicable federal, state, and local requirements;
- an examination of the potential impact of any proposed discharge on municipal and private water supply wells, or POTW's, or surface water, whichever is applicable.

The engineering plans and specifications of a proposed wastewater treatment facility shall include, at a minimum, the following:

- a. materials of construction and specifications for all wastewater treatment system components;
- b. materials of construction and specifications for all wastewater collection system components;
- c. specifications for all instrumentation and alarms;
- d. a site plan and general plant layout;
- e. plan views and profile views, including dimensions showing existing and proposed piping and processing units related to industrial wastewater collection, treatment, and disposal.

With the exception of the documents related to the effluent disposal area, the formal submission of engineering plans and specifications for the proposed wastewater treatment facility to the Department shall not be required.

The engineering report, plans, and specifications shall be **stamped and signed** by a Massachusetts Registered Professional Engineer.

The following is a list of information to be submitted to the Primary Permit Location for groundwater discharge permit applications with monitoring well proposals and with post-installation details. Monitoring wells are required in order to receive a groundwater discharge permit. See DEP publication *Standard References for Monitoring Wells*, Publication No. WSC-310-91 and 314 CMR 5.00 and 314 CMR 6.00.

Monitoring well proposals must include:

1. a locus map indicating the regional location of the sites. A USGS 1:25000 Scale 7 1/2 minute Topographic Series quadrangle sheet is most appropriate.



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- 2. a site map to include:
 - a) location of proposed and existing monitoring wells, borings, test pits, deep holes and subsurface work;
 - b) cultural features (buildings, roads, leachfields, existing wells, subsurface utilities, etc.);
 - c) assumed groundwater flow directions.
- 3. any written descriptions of subsurface conditions expected to be encountered, e.g. published surficial geologic, bedrock, or hydrogeologic atlases (USGS), existing drillers' or geologists' logs, test pit or deep hole test results with percolation rates.
- a well construction detail describing construction materials and installation technique should be included.
 Construction details should be patterned after the well construction guidelines concerning construction and
 screen placement. (See attached diagram.)

These materials must be submitted to and accepted by the Program prior to the installation of the monitoring well(s). The Program reserves the right to request additional information on a case-by-case basis if in the opinion of the Department the sensitivity of the potentially impacted area warrants additional investigation.

Following the acceptance of the monitoring well plan by the Program at the appropriate regional office and the installation of the well(s), the following materials must be submitted:

- 1. A site plan including:
 - a) all the features described in section 2a;
 - b) the as-built well locations:
 - c) groundwater contours and elevations based on monitoring well data.
- 2. Geologists' and drillers' logs for all monitoring wells.
- 3. Monitoring calculations describing potential mounding below the discharge.
- 4. A geologic cross-section utilizing three monitoring wells and including relevant features such as leaching fields, existing and proposed stormwater detention basins, subsurface utilities, streams, roadways, etc.
- 5. A background sampling of the monitoring wells for, at a minimum, the following parameters: water level, ph, specific conductance, alkalinity, nitrogen series, total phosphorus, orthophosphate, chloride and sodium.

If you have any questions please call Division of Watershed Permitting at 617-292-5673.



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BRP WP 11, 12 Permit Fact Sheet

1. What is the purpose of this permit?

These permits are required for any renewal or modification to an existing non-industrial groundwater discharge regulated by DEP in accordance with the provisions at 314 CMR 5.00. They serve to protect the public health, welfare and the environment through the control of pollutant discharges to the ground.

A permit modification or renewal with plan approval (BRP WP 11) consists of an engineering design approval and/or approval of any financial obligation changes. A permit modification or renewal without plan approval (BRP WP 12) consists of minor modifications to the existing permit conditions necessary to bring the groundwater discharge into compliance with current regulatory requirements.

2. Who must apply?

For BRP WP 11: Any person (individual, business, or organization) who holds a valid groundwater discharge permit issued in accordance with 314 CMR 5.00 and wishes to modify the design of the approved facility or the terms and/or conditions of the existing permit, must apply under this permit category.

For BRP WP 12: Any person (individual, business, or organization) who holds a valid groundwater discharge permit issued in accordance with 314 CMR 5.00 and wishes to continue the permitted activity beyond the expiration date of the existing permit must apply under this permit category.

If these categories do not apply to you, please be advised these are not the only permit categories for discharges to the ground. Please consult regulations 310 CMR 4.00, 310 CMR 15.000, and 314 CMR 5.00 to determine whether another category may apply to you.

3. What other requirements should be considered when applying for this permit?

- a. What prerequisites should be considered before applying for this permit?
- If the permittee wishes to continue an activity regulated by the existing permit after the expiration date of the permit, the permittee must apply for and obtain a new permit. The permittee must submit a new application at least 180 days before the expiration date of the existing permit unless permission for the later date has been granted by DEP.
- Permits of this type may require MEPA review. Please carefully examine 301 CMR 11.00, the MEPA
 Regulations, to determine if your project exceeds the MEPA review thresholds, or for more information
 contact the MEPA Unit of the Executive Office of Environmental Affairs (100 Cambridge Street, Suite 900,
 Boston, MA 02114; (617-626-1020). DEP cannot complete technical review of the permit application until
 the MEPA process has been concluded. Copies of MEPA filings (with reference to any applicable
 Transmittal numbers) should be sent to the appropriate program offices in Boston and the MEPA
 Coordinator in the appropriate Regional Office.
- b. What concurrent applications are related to this permit?

The Local Board of Health may have regulations which apply. Also needed is an application for Operator Certification/Facility Rating as required under 275 CMR 2.00.

Note: These additional requirements are intended to serve as a guide to the applicant. They do not necessarily include all additional requirements.



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BRP WP 11, 12 Permit Fact Sheet

4. What is the Primary Permit Location? What is the Reserve Copy Location?

PRIMARY PERMIT LOCATION

Department of Environmental Protection

*Regional Office

Bureau of Resource Protection

*See "DEP addresses and Phone Numbers page included in this package

RESERVE COPY LOCATION
Department of Environmental Protection
Division of Watershed Permitting
1 Winter Street
Groundwater Discharge Permit Section
Boston, MA 02108

5. What is the application fee for this permit?

BRP WP 11, with Plan Approval	\$1,490
BRP WP 12, without Plan Approval	\$725

6. What are the timelines?

As of June 27, 2003, the timelines are:

	AC	T1	T2*	РС
BRP WP 11	30	120	120	90
BRP WP 12	30	120	120	90

^{*(}A second technical review will be conducted only if necessary).

7. What is the annual compliance fee?

Current annual compliance fees can be found on the DEP Website at www.mass.gov/dep/files/permits/fees.htm.

A major groundwater discharge permit is required of a facility for authorization to discharge sewage with more advanced treatment than secondary treatment, discharge of greater than 150,000 gallons per day (gpd) of sewage, or other discharges not included in the minor or other discharge categories.

A minor groundwater discharge permit is required of a facility for authorization to discharge 150,000 gpd or fewer of sewage with secondary treatment or less than secondary treatment, or discharges from coin operated laundromats, or from carwashes.

Other groundwater discharge permits are required of a facility for authorization to discharge noncontact cooling water or storm water, discharge with a heat exchanger, pH adjustment and/or an oil/water separator as the sole means of treatment. If you fail to pay the annual compliance fee, your permit could be suspended or revoked.

8. How long is the permit in effect?

Permits granted in categories BRP WP 11 and BRP WP 12 are in effect for a maximum of five (5) years, provided the permittee remains in compliance with the governing laws and regulations and provided the annual compliance assurance fee is paid.

9. How can I avoid the most common mistakes made in applying for this permit?

- a. Answer **all** questions on the application form and indicate "not applicable" (N/A) where appropriate. One copy of the application form must have an original signature in ink.
- b. Applications for BRP WP 11 and BRP WP 12 must include:



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BRP WP 11, 12 Permit Fact Sheet

- 1) If a modification to the permit is being requested, be sure to include all supporting documentation (e.g., plans and specifications, monitoring data, etc.)
 - i. A complete engineering report (including hydrogeologic data) stamped and signed by a Massachusetts Registered Professional Engineer.
 - ii. Final plans and specifications for the effluent disposal area stamped and signed by a Massachusetts Registered Professional Engineer, as required.
 - iii. Certification Statement for plans and specifications signed by a Massachusetts Registered Professional Engineer, as required.
 - iv. A groundwater monitoring well plan, as required.
- 2) Documents clearly identifying the legal entity responsible for the ownership, proper operation, and maintenance of the proposed facility.
- 3) An original renewal application must be submitted . Photocopies of the first permit will **NOT** be accepted.
- c. Submit fee and one copy of the DEP Transmittal Form to: Department of Environmental Protection, PO Box 4062, Boston, MA 02211.
- 10. What are the regulations that apply to this permit and where can I get copies?

These regulations include, but are not limited to:

- a. Groundwater Discharge Regulations, 314 CMR 5.00.
- b. Groundwater Quality Standards, 314 CMR 6.00.
- c. Timely Action and Fee Provisions, 310 CMR 4.00.
- d. Administrative Penalty Regulations, 310 CMR 5.00.

They may be purchased at:

State House Bookstore Room 116 Boston, MA 02133 617-727-2834 State House West Bookstore 436 Dwight Street Springfield, MA 01103 413-784-1376



Massachusetts Department of Environmental ProtectionBureau of Resource Protection-Groundwater Discharge Permits

BRP WP 11, 12 Application Completeness Check List

	The DEP Transmittal Form is completed. If the applicant is a municipality, "Fee Exempt" has been selected from among the Special Provisions under the Amount Due section of the Transmittal Form.
	The Groundwater Discharge Application Form is properly filled out by the applicant and the consultant engineer and signed in ink.
	Engineering Report has been submitted. (BRP WP 11 only).
	Hydrogeologic Evaluation Report has been submitted. (BRP WP 11 only.)
	Certification Statement for Plans and Specifications for the effluent disposal area signed and stamped by a Massachusetts Registered Professional Engineer has been submitted. (BRP WP 11 only.)
	Final Engineering Plans and Specifications (signed and stamped by a Massachusetts Registered Professional Engineer) have been submitted.
	Groundwater Monitoring Well Plan has been submitted.
	Legal Ownership Documents have been submitted:
	☐ Articles of Incorporation
	☐ Master Deed
	☐ Declaration of Trust
	☐ Other
То	submit the application package:
	Checklist items have been completed.
	Send two copies of the application along with one copy of the DEP Transmittal Form to:
	Department of Environmental Protection Division of Watershed Permitting One Winter Street Boston, MA 02108
	Send one copy of the application along with a photocopy of the DEP Transmittal Form to: Department of Environmental Protection * Regional Office Bureau of Resource Protection *See "DEP Addresses and Phone Numbers" page included in this package



Massachusetts Department of Environmental ProtectionBureau of Resource Protection-Groundwater Discharge Permits

BRP WP 11, 12 Application Completeness Check List

Send fee of:
\$1,490 for BRP WP 11;
\$725 for BRP WP 12;
in the form a of check or money order made payable to Commonwealth of Massachusetts, with one copy of
the DEP Transmittal Form to:

Department of Environmental Protection P.O. Box 4062 Boston, MA 02211



Addresses and Phone Numbers

DEP Boston One Winter Street Boston, MA 02108 Telephone: (617) 292-5500

Fax: (617) 556-1049 TDD: (617) 574-6868 William X. Wall Experiment Station 37 Shattuck Street Lawrence, MA 01843 Fax: (978) 688-0352

Division of Environmental Analysis Telephone: (978) 682-5237 Air Quality Surveillance Telephone: (978) 975-1138

Office of Watershed Management 627 Main Street Worcester, MA 01608 Telephone: (508) 792-7470 Fax: (508) 839-3469

Training Center

627 Main Street, Worcester, MA 01608

Telephone: (508) 767-2880 Fax: (508) 849-4035

Residuals Sludge Management Telephone: (508) 767-4011 WWT Operator Certification Telephone: (508) 767-2880

DEP Western Region 436 Dwight Street Suite 402

Springfield, MA 01103 Phone: (413) 784-1100 Fax: (413) 784-1149



Adams Agawam Alford Amherst Ashfield Becket Belchertown Bernardston Blandford Brimfield Buckland Charlemont Cheshire Chester Chesterfield

Chicopee

Clarksburg

Colrain Conway Cummington Dalton Deerfield Easthampton East Longmeadow Egremont Ervina Florida Gill Goshen Granby Granville Great Barrington Greenfield

Hampden Hancock Hatfield Hawley Heath Hinsdale Holland Holyoke Huntington Lanesborough Lee Lenox Leverett Levden Longmeadow Ludlow Middlefield

Monroe Montague Monterey Montgomery Monson Mount Washington New Ashford New Marlborough New Salem North Adams Northampton Northfield Orange Otis Palmer Pelham Peru

Pittsfield Plainfield Richmond Rowe Russell Sandisfield Savoy Sheffield Shelburne Shutesbury Southampton South Hadley Southwick Springfield Stockbridge Sunderland Tolland

Wales Ware Warwick Washington Wendell Westfield Westhampton West Springfield West Stockbridge Whately Wilbraham Williamsburg Williamstown Windsor Worthington

Tyringham

DEP Central Region 627 Main Street Worcester, MA 01608 Phone: (508) 792-7650 Fax: (508) 792-7621 TDD: (508) 767-2788



Acton Ashburnham Ashby Athol Auburn Ayer Barre Bellingham Blackstone Bolton Boxborough Boylston Brookfield

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Hadley

Hopkinton Hubbardston Hudson Holliston Lancaster Leicester Leominster Littleton Lunenburg Marlborough Maynard Medway Mendor

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DEP Southeast Region 20 Riverside Drive Lakeville, MA 02347 Phone: (508) 946-2700 Fax: (508) 947-6557 TDD: (508) 946-2795



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Freetown Gay Head Gosnold Halifax Hanover Hanson Harwich Kingston Lakeville Mansfield Marion Marshfield Mashpee

Mattapoisett Middleborough Nantucket New Bedford North Attleborough Norton Norwell Oak Bluffs Orleans Pembroke Plainville Plymouth Plympton

Provincetown Ravnham Rehoboth Rocheste Rockland Sandwich Scituate Seekonk Sharon Somerset Stoughton Swansea Taunton

Tisbury Truro Wareham Wellfleet West Bridgewater Westport West Tisbury Whitman Wrentham Yarmouth

DEP Northeast Region One Winter Street Boston, MA 02108 Telephone: (617) 645-6500 Fax: (617) 556-1049 TDD: (617) 574-6868



Amesbury Andover Arlington Ashland Bedford Belmont Beverly Billerica Boston **Boxford** Braintree Brookline Burlington Cambridge Canton Carlisle

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Medford

Melrose

Merrimac Methuen Middleton Millis Milton Nahant Natick Needham Newbury Newburyport Newton Norfolk North Andover North Reading Norwood Peabody

Quincy Randolph Reading Revere Rockport Rowley Salem Salisbury Saugus Sherborn Somerville Stoneham Sudbury Swampscott Tewksbury Topsfield

Wakefield Walpole Waltham Watertown Wavland Wellesley Wenham West Newbury Weston Westwood Weymouth Wilmington Winchester Winthrop Woburn



Bureau of Resource Protection – Groundwater Discharge Permits

BRP WP 05 Experimental or Alternative Treatment Technology or Permits Requiring Groundwater Reclassification

Transmittal Number #

Facility ID (if known)

BRP WP 06 Major Groundwater Discharge Permit

BRP WP 08 Minor Groundwater Discharge Permit

BRP WP 10 Other Groundwater Discharges

BRP WP 11 Modification or Renewal with Plan Approval

BRP WP 12 Modification or Renewal without Plan Approval

BRP WP 42 Groundwater Reclamation Projects

Application for Permit to Discharge to Groundwaters of the Commonwealth

A. Applicant Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Name	
Address	
City/Town	State
Zip Code	Telephone
Facility location:	
Address	
City/Town	State
Telephone	
Contact Person:	
Name	
Title	Telephone
Owner	
☐ Individual☐ Corporation☐ Partnership☐ Other	If other, please specify:
Status	
☐ Private ☐ Public ☐ Other	If other, please specify:



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BRP WP 05 Experimental or Alternative Treatment Technology or Permits Requiring Groundwater Reclassification

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BRP WP 42 Groundwater Reclamation Projects

Ар	plication for	Permit to Discharge to Grou	undwaters of the Commonwealth			
B.	Facility	/ Operator				
	Give the name, as it is legally referred to, of the person, firm, public organization or other entity wh operates the facility described in this application. If the facility owner is also the operator, write own and list mailing address only if different from that listed in number 1 above.					
	Name					
	Address					
	City/Town		State	Zip Code		
C.	Project	t Information				
 Does the project affect a site of historic or archeological significance, as defined in reg Massachusetts Historical Commission, 950 CMR 71.00? 				s defined in regulations of the		
	☐ Yes	□ No				
2.	Does this	project require a filing under	301 CMR 11.00, the Massachus	etts Environmental Policy Act?		
	☐ Yes	□ No				
	If yes, has	a filing been made? (Please	e indicate the EOEA File Number)		
	☐ Yes	□ No	EOEA File Number			
3.	Is this a R	CRA facility as defined in 314				
	☐ Yes	□No				
		omit the information on Form of 314 CMR 8.08.	HW contained in 314 CMR 8.20	in accordance with the		
4.	Are you s	eeking a reclassification of the	ne groundwaters impacted by you	ur discharge?		
	☐ Yes	□ No				
		ver to this question is yes add Massachusetts Groundwater	ditional information should be sul r Quality Standards.	bmitted pursuant to 314 CMR		

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Transmittal Number #

Facility ID (if known)

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BRP WP 08 Minor Groundwater Discharge Permit

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C Project Information (cont.)

C.	Project information (cont.)				
5.	Improvements - Are you required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.				
	☐ Yes ☐ No				
	If yes, answer the following:				
	Description of order or agreement:				
	Identification No. of Affected Treatment Facility				
	identification No. of Affected Treatment Facility				
	Description of Project				
6.	Final Compliance Date Has a hydrogeologic study been performed to determine the potential impact on the groundwater of				
	the discharge or activity?				
	☐ Yes (please attach a copy) ☐ No				
7.	Have plans and specifications for the treatment works been approved (see instructions) by the Department or if approved prior to July 1975, by the Department of Public Health? (If yes, please attach copy of plans and specifications and approval letter.)				
	☐ Yes ☐ No				

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ΛÞ		o Discharge to Orodinawaters of t	ne commonwealth	
C.	Project Infor	mation (cont.)		
8.		ndwater monitoring wells currentle? (If yes, please attach informatig data.)		
	☐ Yes ☐ No			
9.	Do you own the proapplication.)	operty at the discharge site? (Plea	ase provide legal ov	wnership documents with the
	☐ Yes ☐ No			
10.	Have opportunities	for reclaimed water been evaluate	ted?	
	☐ Yes ☐ No			
11.	Is there a local reginelude a copy of the	ulation governing the construction ne local approval.)	of wastewater trea	atment facilities? (If so, please
	☐ Yes ☐ No			
D.	Facility Infor	mation		
1.	Facility Status:		☐ Existing	☐ Proposed
2.	When did or when	will this discharge begin?	date	
3.	Check type of estal contributing to disc	blishment producing or harge:		
		Residential Housing	Total number of bed	rooms
		Remediation Project		
		Other:	Nature of Business	
4.	Design Flow:	Daily Maximum gpd		
	a)	if discharge occurs all year, or		
	b) List months dis	charge occurs	-	
	c) Number of day	s per week discharge occurs		

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D.	Facility Inf	ormation (cont.)
5.	Basis for design	flow:
	☐ The State Er	nvironmental Code – Title 5
	Other:	Specify
6.	Type of treatme	nt and disposal system for discharge to ground:
7.	Location and me	ethod of wastewater treatment solids disposal:
8.	If a commercial	establishment:
	A. Are any type	es of wastewater other than sanitary sewage produced?
	☐ Yes	□ No
	If yes:	Specify type of wastewater
		Quantity gpd
		Method and location of disposal



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F	acili	ty IC) (if	knc	wn)	
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D. Facility	Information	(cont.)
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- B. Are any hazardous wastes generated?
 - ☐ Yes ☐ No
- 9. Does or will the treatment/disposal facility receive industrial wastes?

☐ Yes ☐ No

- 10. Location of Facility:
 - A. Is the facility located on Native American Lands?
 - B. GPS Coordinates:
 - 1) Enter Latitude and Longitude to the nearest whole second for both the wastewater treatment facility and the effluent disposal area.
 - 2) Provide a narrative description of the site and the feature to be permitted. As an example: "The site is on the west side of Main Street, the third building north of High Street. The disposal field lies 100 feet off the southwest corner of the building."
 - 3) Attach a site map based on a USGS topographical map or MassGIS Color Ortho Photography that clearly indicates both your facility and the location of the discharge. The USGS topographical map is available on http://maps.massgis.state.ma.us/MassGISTopos/viewer.htm or the Color Orthophotography on http://maps.massgis.state.ma.us/MassGISColorOrthos/viewer.htm.
 - C. Provide a topographic map or maps of the area extending at least to one mile beyond the property boundaries of the facility which clearly show the following:
 - 1) The legal boundaries of the facility;
 - 2) The location and serial number of each of your existing and proposed intake and discharge structures;
 - 3) All hazardous waste management facilities;
 - 4) All springs and surface water bodies in the area, plus all drinking water wells within one mile of the facility which are identified in the public record or otherwise known to you.
 - 5) All Zone II's or IWPA's.

If an intake or discharge structure, hazardous waste disposal site, or injection well associated with the facility is located more than one mile from the plant, include it on the map, if possible. If not, attach additional sheets describing the location of the structure, disposal site, or well, and identify the U.S. Geological Survey (or other) map corresponding to the location.



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D. Facility Information (cont.)

D. Please list any public or private drinking water supply wells within 2,500 feet of the discharge area:

Well Location	(Public/Private)	Status (Active/Inactive)	Safe Yield

11. Water Supply Data

A. List sources of water supply and annual water consumption for the past five years.

Water Sources	Year 1	Year 2.	Year 3.	Year 4.	Year 5.
1.					
2.					
3.					
Total	: —				

B. Please show the location of your water sources on the map described in question 10.

E. Required Information for Certain Categories

- 1. Flows, Sources of Pollution and Treatment Technologies
 - A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more defined descriptions in Item E.1.B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units and outfalls. If a water balance cannot be determined provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

Note: Answer questions in section E only if you are applying for permits under categories BRP WP 10, BRP WP 42, or, if you are applying under BRP WP 08, when a car wash or laundromat will discharge to groundwater.



2.

Massachusetts Department of Environmental Protection

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E. Required Information for Certain Categories (cont.)

- B. For each discharge, provide a description of:
 - 1) All operations contributing wastewater to the effluent, cooling water and runoff;
 - 2) The average flow contributed by each operation; and
 - The treatment received by the wastewater. (Attach additional sheets if necessary.)
 - 4) With the exception of storm water runoff, leaks, or spills please note if any of the discharges described are intermittent or seasonal.

Operations Contributing to Flow:

Identification Number		Operations	Average Flow	Treatment	
Effl	uent Limitations:				
A.	A. List any pollutant you know or have reason to believe is discharged or may be discharged from the treatment facilities. For every pollutant you list, briefly describe the reason you believe it to be present, its approximate concentration in the discharge and any analytical data in your possession, which will support your statement. Additional wastewater analysis may be required as part of this application.				
Pol	lutant	Concentration	Source	Available Data	



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E.	Require	d Information	for Certain	Categories	(cont.)
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B.	Are your operations such that your raw materials, processed, or products can reasonably be expected to vary so that your discharges of pollutants may during the next five years exceed three times the approximate concentrations reported in item 2A?		
	Yes (please explain)	□No	
C.	Are you planning on adding an	y new processes ov	er the next five years?
	Yes (please specify)	□ No	
D.	Are organic compounds used a	t your facility?	
	☐ Yes (please explain)	□No	
	ere any of the analyses or testing nsulting firm?	reported in item E.2	.A. performed by a contract laboratory or
	Yes (please explain)	□ No	
	Name of Facility		
	Address		
	City/Town		State
	Zip Code		Telephone

3.



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F. Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I will be responsible for publication of public notice of the applicable permit proceedings identified under 314 CMR 2.06(1)(a) through (d)."

Signature of Applicant	Printed Name of Applicant
Date Signed	
Name of Preparer	Telephone
Title of Preparer	